

confluent by their tips. Ovary and style villous; stigma small, subcapitate, scarcely 2-lobed. Capsule 1.5-2 cm long, nearly straight, 2-valved. Seeds ellipsoid, small, smooth, minutely reticulate.

**Flowers and fruits:** August-September.

Occasional, in shade in rocky areas.

**Specimen examined:** Mahadev hills (Amgaon), 352. March 9, 1991

S.M. BHUSKUTE

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### 38. DISTRIBUTION OF *GLOCHIDION HIRSUTUM* (ROXB.) VOIGT IN INDIA (With a text-figure)

During a floristic expedition (1986 to 1990) in Sambalpur district, Orissa, a small population of a small tree was recorded from Pradhanpat falls (Deogarh), which is now identified as *Glochidion hirsutum* (Roxb.) Voigt of Euphorbiaceae. In the same area, another species, *G. zeylanicum* (Gaertn.) A. Juss was also found growing side by side.

Hooker (1887) recorded the distribution of *G. hirsutum* as "Sikkim, Terai and Assam to Chittagong

and Penang (= Pinang)." He also noted that the species was introduced into the Indian Botanic garden "probably from China". Airy Shaw (1972) noted its distribution as "Eastern Himalaya to Hainan, Hong Kong and Formosa (= Taiwan)". In literature, the records of Indian distribution include North Bengal, duars, Sikkim, Andamans and Assam (Hooker 1887, Prain 1903, Kanjilal *et al.* 1940). At the herbarium CAL specimens from West Bengal, eastern Himalaya, Assam, Meghalaya, Arunachal, Tripura, Maharashtra, Karnataka and Andamans represent the Indian distribution. Specimens from West Bengal (and eastern Himalaya) are from Jaldaka valley (500-1000 m) and Dulka Jhar (Darjeeling), which represent the extremity of its distribution in eastern India as well as in south-east Asia.

A scrutiny of the climatic conditions of the areas of distribution of *G. hirsutum* shows that it grows in preferentially in thickly forested hilly regions, generally warm and humid habitat. The distribution is centred between the easternmost hilly tract of India and Malayan peninsula and then extends on both sides. Though no recently published flora in India recorded the species and the collection at CAL are also all old specimens, its occurrence in Darjeeling (eastern Himalaya) in north-eastern region and Malabar (Maharashtra and Karnataka) in the south-western region of India appears broadly discontinuous. Apparently, it shows a climatic disjunctive distribution, and its absence from the eastern coastal regions of the country as well as from Sri Lanka and Kerala remains



Fig. 1. *Glochidion hirsutum* (Roxb.) Voigt

unexplained.

The habitat of *G. hirsutum* below Pradhanpat Falls in Sambalpur district is also within the deep forest and is situated almost on the same latitude ( $\pm 21^{\circ}30'N$ ) as are the places of its distribution in south-east Asia. The place also remains humid throughout the year.

The present record of the species from Orissa is probably another evidence of its discontinuous distribution. The species starts flowering at an early age and produces healthy seeds. Probably, the species migrated to Malabar through the hilly regions of West Bengal, Bihar, Orissa and Madhya Pradesh. It has now been eliminated from the path of its migration, most probably due to the prevailing dry climate of this region except in some very isolated pockets.

However, the present report is not only a new record for Orissa but also for the entire Gangetic plains and the broad central plateau of India.

*C. hirsutum* may be confused in the field with *G. zeylanicum* which is available almost in all the tropical and subtropical regions of India and can be easily distinguished by the following key:

Lamina	tomentose	beneath;	capsule	pubescent	.....	<i>G. hirsutum</i> .
Lamina	glabrous	beneath;	capsules	glabrous	.....	<i>G. zeylanicum</i> .

Being a rare and little known plant in the Indian subcontinent, a brief description is given below to help further exploration in the adjoining regions (Fig. 1):

*Glochidion hirsutum* (Roxb.) Voigt, Hort. Suburb. Calcutta 153. 1845; Muell.-Arg. in Linnaea 32 : 61. 1863; Hook. f. in Hook. f., Fl. Brit. India 5 : 311.

1887; Prain, Beng. Pl. 2 : 931. 1903; Parkinson, For. Fl. Andaman 235, 1921-22; Kanjilal *et al.* Fl. Assam 4: 184. 1940; Airy Shaw in Kew Bull. 26 : 275. 1972. *Bradleia hirsuta* Roxb., Fl. Ind. 3: 699. 1832.

Small tree up to 5 m high with watery latex; branches densely pubescent. Leaves simple, alternate; petiole  $\pm 0.3$  cm long, densely hairy; lamina broadly ovate or elliptic,  $\pm 17.0 \times 7.5$  cm, entire, acuminate, base rounded or slightly cordate, oblique, rusty-tomentose beneath, often drying purplish-brown beneath, lateral nerves  $\pm 10$  pairs. Inflorescence usually very shortly pedunculate and supra-auxiliary, few-flowered. Petals 6 in both sexes, externally hirsute, glabrous within; anthers 6 in male flowers, connective short; ovary globose, hairy; style conical. Capsule subglobose, obscurely lobed, ends slightly depressed,  $\pm 0.5$  cm across, pubescent with persistent style and perianth.

**Flowers and fruits:** September to April

**Specimen cited:** Pradhanpat, Deogarh, 23 January 1989, *Das et Panda 1350* (CAL)

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SAURIS PANDA  
A.P. DAS

October 22, 1990

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### 39. THE OCCURRENCE OF *PHALAENOPSIS CORNU-CERVI* (ORCHIDACEAE) IN ANDAMAN AND NICOBAR ISLANDS

*Phalaenopsis cornu-cervi* (Breda) Bl. & Reichb. f. was described by Breda under the genus *Polychilos*. However, Blume and Reichenbach (1860) recognised that it is better placed under *Phalaenopsis* Bl.

Kurz (1876) reported this species as occurring in the tropical forests of Kamorta island. Sweet (1980) gave the world distribution of this species as Sarawak, Borneo, Java, Sumatra, Thailand, Malaysia, India based on Kurz's collection from Nicobar Island and

Burma. Vasudeva Rao (1986) does not include this species in his list. Karthikeyan *et al.* (1989) gave the distribution of this species in India as eastern Himalaya and north-east India.

The plant has not been collected again in Andaman and Nicobar islands since its report by Kurz in 1876 from Nicobar island. It is to be noted that Nicobar group of islands have more species common with Indonesia in the south and Malaysia in the east.